Trade Liberalization and Sustainable Economic Growth in Nigeria

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Abstract: This study examined how trade liberalization affected Nigeria's long-term economic development from 2000 and 2021. Trade liberalization is the elimination or decrease of limitations or barriers to the free flow of products between nations, whereas sustainable development is development that fulfills today's demands without jeopardizing future generations' capacity to satisfy their own. Gross fixed capital creation, trade liberalization, labor force participation, inflation, and interest rates are essential explanatory factors, whereas economic growth, measured by gross domestic product, is the dependent variable utilized for model specification. The study's data came from the Central Bank of Nigeria's Statistical Bulletin, 2021, as well as the World Development Indicator. Unit Root underwent an augmented Dickey Fuller (ADF) test. The Johansen co-integration test was used to determine the existence of co-integration in the research. The linear regression findings reveal that trade liberalization and gross fixed capital have a positive and substantial effect on economic growth. Inflation and interest rates were shown to have a negative influence on economic growth, whereas labor force participation rate was found to have a positive impact on economic growth. However, a positive link was established between trade liberalization and economic growth. This report suggests that the government implement suitable policies to diversify the productive base of the economy in order to encourage net exports, as well as construct an efficient service infrastructure to stimulate private domestic and international investment. Furthermore, the government should give sufficient incentives to manufacturers of export items, stimulate consumption of locally produced commodities, and guarantee adequate standard controls to ensure that goods produced for export meet international standards.

Keywords: Co-integration, economic growth, inflation, interest rate, labour force participation, protectionism, sustainability.

1. Introduction

Trade liberalization is an important economic factor that is seen to be a growth driver. Trade occurs not only in terms of goods, but also in terms of technology, information flows, and knowledge spillover. Economists believe that trade liberalization in the global economy has a favorable influence on economic growth and will drive micro and macroeconomic activity. Trade liberalization is critical for the Nigerian economy to achieve economic progress. Trade liberalization may be considered as the decrease or removal of imports and exports restrictions (tariffs and quotas) and providing easy access to trade partners (Cardiff, 2018). Trade liberalization is the elimination or decrease of limitations or barriers to the free trade of products between nations. This involves the elimination or decrease of tariff (duties and surcharges) and non-tariff barriers (such as licensing laws, quotas, and other requirements). The reduction or elimination of these constraints is sometimes referred to as encouraging free trade. It is a policy in which the government does not discriminate against imports or interfere with exports by applying tariffs (to imports), subsidies (to exports), or quotas. According to the law of comparative advantage, the policy allows trading partners to derive reciprocal benefits from the exchange of products and services (Akindamola, 2018). The globe has become a global village, and the current moment in national history is one of globalization. No country today can thrive without foreign trade. Countries are liberalizing their trade policy to maximize profits from comparative advantages.

Trade liberalization is increasingly recognized as one of the key methods for boosting economic growth. There is a wealth of research on the link between trade liberalization and economic development, but it remains a source of contention among policymakers owing to the empirical findings of numerous studies. According to Chaudhry, Malik, and Faridi (2020), trade liberalization policies provide opportunities for nations' economy to thrive and support general development. During the previous several decades, the globalization movement has resulted in numerous fundamental changes to the basic structure of economic activity at both the national and international levels. One of the most essential aspects of global economic integration is the rapid drive toward trade liberalization. The influence of the IMF, World Bank, and WTO cannot be overlooked in this respect (Echekoba, Okonkwo, & Adigwe, 2015).

Historical data over the previous several decades reveal that the amount of global trade has expanded considerably. According to the World Development Indicator, the global trade-to-GDP ratio will grow in the 2020s, raising the per capita income of almost 3 billion people worldwide. The trade liberalization process in Pakistan began in the late 1980s and has continued to increase over time. The government of Pakistan has implemented several changes to boost open international transaction flows. IMF stabilization and structural adjustment packages were adopted till 2003 (Emanakuku, 2020). One of the most important facts investigated by the World Bank is that current economic reforms and policies undertaken by the Pakistani government are sufficient for trade liberalization, and Pakistan's economy is the most open in South Asia (Johansen & Juselius, 2020). Pakistan's good export performance in recent years can undoubtedly be attributed to improvements in its incentive structure and export environment as a result of trade liberalization. Trade liberalization has progressed at an amazing rate during the previous few decades. The amount of regulatory obligations has decreased dramatically (Manni & Afzal, 2017).

Trade liberalization and a country's degree of openness over time are factors examined by economists, planners, and policymakers throughout the world (Yasmin, Jehan, & Chaudhary, 2016). Many economists believe that trade liberalization improves macroeconomic performance and promotes economic growth. Most studies, including those conducted by the World Bank, the International Monetary Fund, and the Organization for Economic Cooperation, concluded that trade liberalization has a favorable impact on economic growth. There is a large body of literature on trade liberalization, which has been used in several research. Trade liberalization-led economic development is a hotly disputed issue among economists. Mercantilist Smith and Ricardo highlighted the need of trade liberalization. Neo-classical growth theories, which supply most of current economic growth theories, argued that trade liberalization has positively benefited economic growth in the medium term but cannot continually effect growth in the very long run (Rahim & Abedin, 2018).

Theoretical framework is based upon Romer Endogenous or new growth theory model introduced by Romer (1986) and Lucas (1988). It explains that trade liberalization leads towards economic through various channels. Trade liberalization increases capital inflows and this takes several forms like FDI which is an important source of capital inflow which fulfils the investment gap in the economy. Capital inflow increases investment level in the economy which leads towards more production, more output and increases market size. Furthermore, increase in production process will cause increase in employment level which reduce poverty. It provides developing economies access of new technological innovation of developed countries. It provides both consumer and producer, easy access to larger markets so they can gain the benefits of economic scale. Another important impact of trade liberalization operates through knowledge and technology transmission (Shaheen, Ali, Kauser & Ahmed, 2018).

The aim of the study is to investigate the impact of trade liberalization on sustainable economic growth in Nigeria from 2000 to 2022. An attempt also was made to explore the insight into the trends and relation of various variables. The study has following specific objectives: There is positive impact of trade liberalization on economic growth in Nigeria. There is positive impact of gross fixed capital formation on economic growth. Labour force participation has positive impact on economic growth. What is the relationship between inflation and economic growth.

2. Literature Review

Conceptual Issues on Trade Liberalization

Liberalization may simply be defined as a shift away from direct governmental and regulatory constraints and toward market-driven behavior for pricing and resource allocation. commerce liberalization entails reducing barriers to international commerce and promoting free trade. De Silva, Chidmi, and Johnson (2018) defined Trade Liberalization as the increased integration of international markets for products, tradeable services, and financial assets. In the true meaning, it also refers to the increasing integration of markets for significant inputs to production (not just movable physical capital) but also labor in its different forms: basic labor, skilled labor, and other professional services. Trade liberalization is therefore a multifaceted term that may be understood as the formation of a multitude of links and interconnectivity between States and the communities that comprise the contemporary World, also known as the global village. It is also a process by which events, decisions, and actions in one area of the world have a big impact on individuals and communities in very distant parts of the globe. Trade liberalization entails lowering tariffs, reducing or abolishing quotas, and lowering non-tariff obstacles. Non-tariff barriers are those that make trading difficult and costly. For example, imposing special limitations on imported items might offer domestic companies an unfair advantage. Harmonizing environmental and safety regulations facilitates international trade.

Concepts of Economic Growth

Economic growth is the rise in the quantity of products and services generated by the economy over time (Wikipedia, 2015). It refers to a rise in an economy's ability to generate products and services over time (Investopedia, 2015). It is calculated as a proportion of the country's GDP. Economic growth is viewed as a primary aim of national policy in each given economy. Echekoba, Okonkwo, and Adigwe (2015) define economic growth as "an increase in the total output (goods or services) produced by a country." It shows a rise in an economy's capacity to generate products and services over time. Economic growth refers solely to the quantity of goods and services generated. Economic growth can be assessed in nominal terms, including inflation, or in real terms, which are corrected for inflation, such as the percentage rate of rise in the gross domestic product (GDP). Economic growth is measured in monetary terms and does not consider other dimensions of progress (Eli, Hecksher, & Bertil Ohlin, 2018). Economic growth may be favorable or detrimental. The term "negative growth" refers to the economy decreasing. Negative growth is linked to economic recession and depression (King & Levine, 2018). Elliot, Rothenberg, and Stock (2017) defined economic growth as a long-term development caused by an increase in savings and population. It has also been characterized as a positive shift in a country's level of output of products and services during a specific period of time. Economic growth is defined as a rise in the quantity of products and services produced in a country. An economy is considered to be expanding when it expands its productive capacity, which then yields more in production of more commodities and services.

Economic growth is often driven by technical innovation and positive external pressures. It serves as a measure for enhancing people's standards of life. It also indicates a reduction in economic inequality. Economic growth can be quantified in either nominal or real terms. In nominal terms, it includes inflation, but in real terms, adjustments for inflation are performed to remove the distorting influence of the price of goods and services produced. The GDP or GNP per capita income is utilized for inter-country comparisons since it takes into account the population disparities between various countries. Nigeria's primary economic aim is to achieve sustainable economic growth and development, as measured by GDP. It is the total amount of products and services generated by the economy each year. Economic growth is defined as a rise in a country's national income or total amount of products and services produced, coupled by an improvement in the people's overall living standards (Hamad, Mtengwa, & Babiker, 2018). The Real Gross Domestic Product was used to measure economic growth. Real Gross Domestic Product is defined as the total monetary worth of all the final products and services produced within an economy within a specific period of time, often one year. The term 'real' in gross domestic product suggests that inflation has been controlled. In other words, real GDP is based on constant prices rather than current prices (Pacheco-López 2015). In economic research, real GDP is often employed as a proxy for economic growth. Economic growth is the consistent rise in an economy's production over a certain period of time. Thus, when a country's real GDP increases steadily, the economy is considered to be expanding. The real GDP will be calculated in Nigerian currency units (Johansen & Juselius, 2020).

Theoretical Review

Absolute Advantage Trade Theory

In The Wealth of Nations, published in 1776, Adam Smith challenged the dominant commercial ideology of the day. Adam Smith's An Inquiry into the Nature and Causes of National Wealth (London: Strahan & Cadell, 1776). Recent editions have been edited by academics and economists. Smith proposed a new trade theory known as absolute advantage, which emphasized a country's capacity to manufacture an item more effectively than another. Smith argued that government policy or interference should not limit or impede cross-border trade. He said that commerce should flow spontaneously based on market factors. In a hypothetical two-country scenario, if Country A could produce an item cheaper or faster (or both) than Country B, it would have an advantage and might specialize in providing that commodity. Similarly, if Country B excelled in producing another item, it may concentrate on specialization as well. Countries would gain efficiency through specialization since their work force would grow more proficient by performing the same activities. Manufacturing would also become more efficient since there would be an incentive to produce quicker and better manufacturing processes, increasing specialization (Echekoba et al., 2015). Smith's idea was that higher efficiency would benefit both countries and should stimulate trade. His idea argued that a nation's wealth should be assessed by the living conditions of its people rather than the amount of gold and silver it owned.

Country Similarity Theory

Steffan Linder, a Swedish economist, established the nation similarity hypothesis in 1961 to explain the notion of intra-industry trade. Linder's thesis stated that consumers in nations at similar stages of development would share similar tastes. Linder proposed in this firm-based theory that corporations create first for domestic consumption. When firms consider exporting, they frequently discover that markets that are comparable to their domestic ones in terms of client preferences have the highest potential for success. According to Linder's nation similarity hypothesis, the majority of trade in manufactured goods will be between countries with comparable per capita incomes, with intra-industry trade being prevalent. This theory is often most useful in understanding trade in goods where brand names and product reputations are important factors in the buyers' decision-making and purchasing processes (Steffan, 2015).

Global Strategic Rival Theory

Global strategic competition theory arose in the 1980s, drawing on the work of economists Paul Krugman and Kelvin Lancaster. Their idea centered on MNCs and their efforts to achieve a competitive advantage over other multinational enterprises in their field. Firms will face worldwide competition in their industry, and to thrive, they must build competitive advantages. The essential methods in which enterprises might gain a durable competitive advantage are referred to as the industry's entry barriers. The barriers to entry are the challenges that a new business may experience while attempting to join a new sector or market. According to Krugman and Lancaster (2017), firms may strive to optimize the following entry barriers: 1. Research and development 2. The ownership of intellectual property rights 3. Economies of scale 4. Unique business processes or methods as well as extensive experience in the industry 5. The control of resources or favorable access to raw materials.

Empirical Review

Rahim and Abedin (2018) investigated the link between trade liberalization and economic development. Their findings indicate that there is a strong positive association between trade liberalization and economic development. This conclusion suggests that governments who have not fully opened their economies might begin opening them to seek potential economic development through international commerce.

Parikh and Stirbu's (2018) research on a case study in Brunei Darussalam supports these findings, demonstrating that trade openness may increase economic growth. In addition to trade, service liberalization boosts per capita income in both poor and high-income nations (Briggs and Sheehan, 2018). Even commerce across areas can influence economic growth. Foster (2008), Kwanga (2015), and Huchet-Bourdon et al. (2018) have all undertaken research with similar goals. However, their findings differed. Trade liberalization and economic growth were found to have a nonlinear connection. Trade liberalization has a negative short-term impact on economic growth, but a beneficial long-term impact. Rakshit (2021) found that trade openness has a detrimental influence on economic growth. Furthermore, the impact of trade openness on economic growth differs by industry. Trade openness has a good influence on the agricultural and industrial sectors, whereas the service sector has a negative

impact.

Manni and Afzal (2017) demonstrate that growth in 95 developing countries between 1976 and 1985 is negatively connected with two indices of how closed developing economies are to trade: an indicator of real exchange rate distortion and an index of real exchange rate fluctuation. According to Sachs and Warner (2015), growth has a positive relationship with the openness measure based on a variety of policies affecting international economic integration. Edward (2014) regresses his estimate of total factor productivity growth on a number of pre-existing indicators of trade openness, and finds that most indicators are oddly positively linked with productivity growth. Cardiff (2018) does similar research for GDP growth rates in emerging countries, discovering that growth is positively connected with a lag to trade liberalization. Ben-David (2013) discovered that trade openness lowers income disparities across liberalizing nations. Frankel and Romer (2013) discover that nations that trade more because of their advantageous location expand faster after World War II, a finding that Irwind and Tervio (2012) extend to the early twentieth century. Cardiff (2018) discovered that increased commerce raises the income of the poor. However, Bashar and Khan (2017) disagree with all of these studies, claiming that measures of openness are frequently a poor indicator of trade barriers, are significantly associated with other variables of economic performance, or have no relationship to trade policy. Furthermore, more advantageous geography affects income level through the quality of institutions rather than through trade integration.

Echekoba, Okonkwo, and Adigwe (2015) provide evidence that increasing trade openness can lead to economies of scale and productivity improvements. However, there has been a growing realization in recent years of the significance of complementing policies in maximising the benefits of a more open trade policy. Such policies include strong macroeconomic policies, market-supporting institutions, enough infrastructure, proper business rules, well-functioning credit markets, and flexible labor markets. We use the ratio of imports and exports to total GDP as a proxy for trade openness. However, this statistic may add a bias, particularly in nations whose trade flows are dominated by natural resources such as oil. To account for this bias, we additionally utilize two alternative indicators: the degree of trade openness at the start of the sample period and the proportion of the sample period in which the nation was deemed open index.

Dava (2017) investigates the link between trade openness and economic development during the period 1952-2003. The analysis considers three variables: the yearly growth rate of GDP per capita, the openness index (exports plus imports divided by GDP), and the investment share of GDP. The data came from the Penn World table, version 6.2. They used the Granger non-causality test using a panel data technique based on SUR (seemingly unrelated regression) systems.

In their study 'The uneven Effects of Liberalization: Theory and Evidence from India,' Yasmin, Jehan, and Chaudhary (2016) use the 1991 Indian liberalization to demonstrate how such a change may have uneven effects on industries and regions within a single country. Using a Schumpeterian growth model and panel data set for the sixteen key Indian states during the period 1980-1997 to examine the effects on growth and inequality of liberalization initiatives aimed at expanding entry. The empirical results confirm that the 1991 liberalization in India had strong equalizing effects by fostering productivity growth and profits in 3-digit industries that were initially closer to the Indian productivity frontier and in states with more flexible labor market institutions. And finally concludes that the initial level of technology and institutional context mattered for whether and to what extent industries and states in India benefited from liberalization.

The primary goal of 'Trade Liberalization, Economic Growth, and Poverty Reduction Strategies' by Shaheen, Ali, Kauser, A., and Ahmed (2018) was to investigate the influence of trade on economic growth and poverty reduction. Empirical data was utilized to form conclusions, and it was found that, based on current empirical evidence, trade liberalization appears to have a beneficial influence on growth; however, the impact appears to be dependent on the presence of essential economic institutions and complementing policies. This study also provides significant evidence that economic progress decreases absolute poverty.

In their paper "Trade Liberalization and Economic Development: Evidence from Pakistan," Rahimi and Shahabadi (2021) attempted to explain the link between trade liberalization and economic development in Pakistan. They used the simultaneous equation model and the 2SLS regression analysis approach to investigate how trade liberalization affects the country's economic development. Its impacts were evaluated in relation to four

metrics of economic development: per capita GDP, income inequality, poverty, and employment for the period from 1960 to 2003. The analysis revealed that trade liberalization did not have a consistent effect on all of the development variables studied throughout time. It boosted employment but had a detrimental impact on per capita GDP and income distribution. However, it had little effect on poverty. According to the report, trade liberalization did not have a positive impact on all development metrics in Pakistan. Thus, the research determined that there is a need for a careful approach toward liberalization.

Parikh and Stirbu (2018) in a thesis titled "Trade Liberalization and the Environment: A Study of NAFTA's Impact in El Paso, Texas And Juarez, Mexico, attempted to foster a better understanding of the linkages between trade liberalization and environmental quality in a free trade zone along an international border between nations with disparities in development and infrastructure. According to the findings, trade liberalization is not always bad for the environment. The data-driven conclusion implies that NAFTA had little to no direct detrimental influence on the region's environmental state, but it also fails to produce proof that NAFTA helped the environment.

In 'Trade Liberalization and Economic Expansion: A Sensitivity Analysis,' Herath (2018) attempted to investigate the nature of the link between trade liberalization and economic expansion. Granger multivariate tests were used to determine why exports represent a fundamental determinant of economic performance in Ireland, whereas exports do not affect economic growth in Greece, Portugal, and Spain. It was concluded that it was very difficult to analyze the role of trade liberalization in economic performance and to determine the factors that affect the causal links between exports and real GDP, stating that more empirical evidence from development. The theoretical possibility that trade liberalization might have a negative effect on economic performance has been demonstrated in various endogenous growth studies.

Hamad, Mtengwa, and Babiker (2018) attempted to study the influence of trade liberalization on economic growth using the Schumpeterian growth model in their paper 'Differential Effects of Trade Liberalization on Economic Growth: Role of Human Capital Accumulation'. It was discovered that in an economy with more unskilled labor resources than its trading partners, trade liberalization may have a short-run positive effect on per capita income growth rate, but in the long run, it may reduce the equilibrium growth rate. He also adds that it is not realistic to believe that trade openness across countries would have the same effect, adding that it depends on the unique conditions.

3. Methodology

The linear regression model will be used for regressing the predictors on the predict and the model takes the form: $GDP=\beta_0+\beta_1 LIBE+\beta_2 GFCF+\beta_3 INF+\beta_4 INT+\beta_5 LFP+\varepsilon$. Thus, the data and source was based on the secondary source of data ranging from 2000 to 2022. Economic growth is the main dependent variable proxied as GDP (Gross domestic product). The independent variables are trade liberalization (LIBE), interest rate (INT), inflation (INF), labour force participation (LFP) and gross fixed capital formation (GFCF). The source of the data is the World Development Indicator (WDI). Two types of the tests were used for the analyses which are Augmented Dickey Fuller (ADF) test and Unit Root test. In time series analysis an Augmented Dickey-Fuller test (ADF) for the unit root is often used. ADF test is an augmented version of dickey fuller test for a larger and more problematical set of time series models. The augmented dickey fuller statistic is a negative number, which is used in the test. The more negativity of it shows that the stronger decision about the refusal of the hypothesis which is given as there is a unit root at some level of confidence.

The ADF test is applied to the model; $+ - - - - + \Delta + + \Delta + + + = \Delta \varepsilon \delta \delta \gamma \beta \alpha 1\ 1\ 1\ 1 .... , t\ t\ t\ p\ t\ p\ t\ y\ t\ y\ y\ y$ In this equation α present the constant term, β present coefficients for the time trend and p is the lag order for the autoregressive process. The ADF formulation makes the advanced order process possible after the addition of the order p. It means when we add lag length p has to be calculated. Then we use unit root test under the null hypothesis $\gamma=0$ against the alternative hypothesis $\gamma < 0$. ( ) DF $\tau SE\ \gamma\ \gamma =$ After the computation the value the T-Statistic is compared with the critical value. If statistic is less than critical value then we reject the null hypothesis and conclude that the series is stationary.

Johansen Jeselius Test Co integration test is designed as Johansen Jeselius test (2020). This test is based on vector autoregressive (VAR) model. It is used to test whether non-stationary series are co-integrated or not. The

Johansen co-integration tests lots of co-integrating relations. All factors are used as endogenous then the test is not affected by choice of output factors and the variable being normalized. VAR deals with endogenous factors in the composition as a function to show that all endogenous factors in the structure. A model which has more than two variables can have the opportunity of containing the one or two co integration vectors. If there is more than two variables in the model than there is a problem will arise. To resolve this problem Johansen approach is best for multiple equations. This technique is a five step procedure and is provided in detail by the author Johansen Jeselius (2020).

4. Empirical Results and Discussion

ADF Test Unit root test is necessary for all the variables at the first place to check their stationarity. Then DF test was applied to test the integration properties of the data in the time series data. The mean and the variance of the data are same for the same time period to accomplish the stationary characteristics.

Unit Root Test Unit root test is applied to check the stationarity of the variables. We have applied this test on the variables: Gross domestic product per capita (GDPPC), trade liberalization (TLIBE), labour force participation (LFP), gross fixed capital formation (GFCF), interest rate (INT), and inflation (INF). The results are displayed in Table 2. It came out that all the variables became stationary at the level of integration I (1). This test makes the study free of spurious regression.

Johansen-Juselius Test for Co-Integration Johansen Juselius test was applied after making all the stationary. The results of ADF test suggest that as all the variables are on first difference, so we can apply the Johansen Juselius co integration test. Johansen co integration test results are shown in Table. 3 on the basis of two likelihood ratio test statistics of the trace and maximum Eigen statistics which are most common in use to find out the number of co integrating vectors in the study. It is Co-integration between and also sign of a long run correlation between the dependent economic growth (GDP) and independent variables GFCF (gross fixed capital formation), LFP (labour force participation), LIBE (trade liberalization), INF (inflation) and INT (interest rate).

The Co-integration test was conducted for series as they are integrated at first difference or integrated of first order. The first column shows the hypothesized values second shows Eigen values. Third column have trace values and in next column critical values shows. This is based on Mackinnon-Haug-Michelis (1999) of trace. In the last column probability values are showed. Trace test indicate one co-integrating equation at the 0.05 level. The first value of trace statistic is 126.2017 which is greater than trace critical value 117.7082. Next trace value is less than critical value. Third value of trace statistic is also lower than critical value. And fourth value is 29.76291 and less than critical value 42.91525 and all other values are also less than critical values.

The first column shows the one Co-integration value. Linear deterministic trend was assumed in this test. The trace statistic criterion shows that at most one co-integrating vector exists. Another criterion i.e. Maximum-Eigen statistic test confirm the null hypothesis rejection at level 5%. The next Table no. 4 shows the results of the unrestricted co-integration rank test. The results verify the long run significant relationship between the variable. In the results of Table, no 4, first column shows Co-integration equation. The second column shows Eigen values, next column shows the Max-Eigen statistic values and second last column shows critical values. In the last column probability values are showed. First value of the Max- Eigen statistic value is 45.69014 which is greater than critical value 44.49720. So max Eigen value also indicate one co-integrating equation at level 0.05. Both values show the rejection of hypothesis at 5% level.

Error Correction Analysis (Stability Condition) The error term represents how quickly the adjustment of variables takes place to restore the equilibrium in the dynamic model. Table no 5 shows the stability analysis where dependant variable is GDPPC of Pakistan and independent variables are trade liberalization, labour force participation, interest rate, inflation, gross fixed capital formation. Column 1 of Table no 5 shows the list of dependant and independent variables. Column 2 shows the cointegrating vectors. Column 3 shows the error correction coefficients. Last column shows the significance of these variables. Stability condition is used to analyse the error correction mechanism. The necessary condition of Stability condition is that the sum of the product of co-integrating coefficient and error correction coefficient must be negative. This is satisfied in our case. The sufficient condition of stability condition is that the individual product of co-integrating coefficients and error

correction coefficient be negative. The variable TLIB show positive sign and it is significant as well so, if any discrepancy occurs in the long run in the model, it would be corrected by TLIB. The variable INT is showing negative sign and it is significant in our case. GFCF is also negative sign and significant in our case. If any discrepancy occurs in the model, it would be corrected by that variable.

5. Conclusion and Policy Recommendations

Conclusion

This empirical study examines the influence of trade liberalization on Nigeria's long-term economic development from 2000 to 2022. Johensen-Jeselius (2020) invented the Johansen co-integration approach, which is employed in this work. In this study, the researcher uses economic growth as the dependent variable, measured by GDP, and gross fixed capital creation, labour force participation, inflation, interest rates, and trade liberalization as the independent variables. The findings indicate that trade liberalization has a favorable influence on economic growth. The results indicate that gross fixed capital development will have a beneficial influence on economic growth. Inflation has a detrimental influence on economic growth. When inflation increases, it is bad for the economy. Interest rates have a detrimental influence on economic growth. The labor force has a favorable influence on economic growth. Theoretical literature and several empirical researches have shown that trade liberalization benefits all countries. Our empirical findings support trade liberalization. Trade liberalization leads to increased economic growth. Every country that pursues trade liberalization reaps the benefits of increased economic growth. The majority of economic literature concludes that trade liberalization increases wellbeing by improving the allocation of domestic resources. The pattern and structure of Nigeria's economy also demonstrate that as the country opened up to the rest of the globe, its economic growth began to accelerate. Trade liberalization expands economy to other country. It gives opportunities to exports and imports to other countries. So we summarize that trade liberalization is beneficial for the economy. Therefore, it has a positive impact on economic growth in Nigeria.

Recommendations

In this study, we discovered that trade liberalization boosts economic growth in Nigeria. The following policies have been advocated based on empirical evidence. All of these proposals will assist to accelerate the growth of Nigeria's economy: The report argues that Nigeria should pursue stronger trade liberalization measures to boost economic growth. Inflationary pressures, particularly those affecting food costs, pose a persistent threat to the poor. There is little question that rising inflation rates, if not adequately controlled, will undermine the majority of growth-enhancing strategies. Because Nigeria is a labour-rich country, it should prioritize the manufacturing and export of labor-intensive products, such as textiles.

Nigeria should improve the performance of its mediation for trade liberalization to be effective in promoting growth and development. For trade liberalization to be a significant contributor to economic growth, Nigeria should focus on improving infrastructure, capital accumulation, establishing entrepreneurship, developing a secure macroeconomic framework.

Government must continue to adopt appropriate policies to diversify the productive base of the economy, in order to promote net exports, and build up an efficient service infrastructure to drive private domestic and foreign investment. Hence, it is further suggested that government should provide necessary incentives to produce export products. Furthermore, to enhance export performance, the government has to undertake systematic review of the effectiveness of the subsidy reinvestment program (SUREP). Domestic trade policies have to be reformed by reducing anti- export bias through fully implementing the lower duty rates of ECOWAS. Nigeria should continue the privatization program and service sector liberalization to reap the benefits from openness

Dependency on import goods both at domestic and industrial production level should be discouraged with the aim of embarking on import substitution approach to economic development in Nigeria. The financial sector has to be closely monitored by the Central Bank, especially commercial banks. This is to ensure stability in the interest and exchange rate. The Nigerian government also needs to moderate its trade liberalization policy as the economy seems too weak to absorb the negative shocks from external trade.

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Table 1. Descriptive Statistics

	GDPPC	LFP	GFCF	TLIB	INT	INF
Mean	2.100577	49.83161	16.03371	33.53000	4.631088	9.473870
Maximum	6.692049	58.81000	19.23542	38.90949	6.813333	26.66303
Minimum	-1.899638	32.20200	11.43511	27.71982	1.835121	2.914135
Std. Dev.	1.946800	5.072849	1.954491	2.855445	1.489359	5.258987
Jarque-Bera	0.501559	73.42443	4.501914	0.723334	2.930363	23.99287
P-value	0.778194	0.000000	0.105298	0.696514	0.231036	0.000006

Table 2. Unit Root Test on Level

Unit Root Test on Level							
Variables	None	Lags	Intercept	Lags	Intercept and Trend	Lags	Conclusion
GDPPC	-1.6119	1	-1.9448	0	-2.624	0	I(1)
TLIBE	-0.0790	0	-2.2473	0	-2.4358	0	I(1)
GFCF	-0.2399	0	-1.8819	0	-2.1324	0	I(1)
LFP	0.18054	1	-1.9490	1	2.0628	0	I(1)
INT	-0.7222	0	-1.5729	0	-2.6831	0	I(1)
INF	-1.4019	0	-1.8089	1	2.4853	1	I(1)

Table 3: Results of the Johansen Juselius Co-Integration

Date: 26/09/23 Time: 04:37
Sample (adjusted): 2000 2022
Included observations: 22 after adjustments
Trend assumption: Linear deterministic trend
(restricted) Series: GDPPC GFCF LFP
TRADE INF INT
Lags interval (in first differences): 1 to
1 Unrestricted Cointegration Rank Test
(Trace)

Hypothesized No. of CE(s)	Eigen value	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.671886	126.2017	117.7082	0.0130
At most 1	0.567197	80.51052	88.80380	0.1708
At most 2	0.329864	46.17416	63.87610	0.5921
At most 3	0.302213	29.76291	42.91525	0.5163
At most 4	0.197866	15.00940	25.87211	0.5738
At most 5	0.135499	5.969719	12.51798	0.4642

Table 4. Unrestricted Co-integration Rank Test (Maximum Eigen Value)

Hypothesized No. of CE(s)	Eigen value	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.671886	45.69014	44.49720	0.0369
At most 1	0.567197	34.33636	38.33101	0.1342
At most 2	0.329864	16.41125	32.11832	0.8924
At most 3	0.302213	14.75351	25.82321	0.6565
At most 4	0.197866	9.039681	19.38704	0.7204
At most 5	0.135499	5.969719	12.51798	0.4642

Table 5. Results of Stability Condition

variables	C.I vector	E.C coefficint	C.I coff*	E.C coeff	Significance(E.C)
GDPPC	1	0.006797	0.006797	ok	Significance
LFP	-15.453	-0.00678	0.0104776	ok	Insignifinace
GFCF	-79.097	0.004644	-0.36733	ok	Significance
TLIB	20.5619	-0.00951	-0.19552	ok	Significance
INT	-10.8244	-0.00088	0.009558	ok	Significance
INF	10.74978	-0.02289	-0.24601	ok	Insignificance
		-0.02862	-0.68773		

DATA ON LABOUR FORCE PARTICIPATION, INTEREST RATE, INFLATION AND ECONOMIC GROWTH IN NIGERIA FROM 2000 – 2022

Nigeria	Labour force participation	Interest rate	Inflation%	Growth %
2000	30.03	-1.14	6.93	5.02
2001	30.09	12.14	18.87	5.92
2002	30.11	3.02	12.88	15.33
2003	30.12	9.94	14.03	7.35
2004	30.13	-2.60	15.00	9.25
2005	30.13	-1.59	17.86	6.44
2006	30.32	-5.63	8.23	6.06
2007	30.45	9.19	5.39	6.59
2008	30.55	6.68	11.58	6.76
2009	30.62	18.18	12.54	8.04
2010	30.67	1.07	13.74	8.01
2011	30.80	5.69	10.83	5.31
2012	27.02	6.22	12.22	4.23
2013	23.54	11.20	8.50	6.67
2014	23.76	11.36	8.05	6.31
2015	23.98	13.60	9.01	2.65
2016	24.19	6.69	15.70	-1.62

2017	24.41	5.79	16.50	0.81
2018	24.63	6.06	12.10	1.92
2019	24.84	4.52	11.40	2.21
2020	24.49	5.37	13.23	-1.79
2021	24.65	2.96	16.95	3.40
2022	25.09	5.34	18.85	3.10

Source: Federal Ministry of Finance & Central Bank of Nigeria